

REMARKS

This is a full and timely response to the final Office Action of March 2, 2004. Reexamination, reconsideration, and allowance of the application and all presently pending claims are respectfully requested.

Upon entry of this Third Response, claims 1-33, 35-40, 44, and 46-55 are pending in this application. Claims 1, 3-5, 9, 11-13, 16, 24, 30-33, 35, 36, and 44 are directly amended herein, and claims 34, 41-43, and 45 are cancelled without prejudice or disclaimer. Further, claims 46-55 are newly added. It is believed that the foregoing amendments add no new matter to the present application.

Response to §102 Rejections

A proper rejection of a claim under 35 U.S.C. §102 requires that a single prior art reference disclose each element of the claim. See, *e.g.*, *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983).

Claim 1

Claim 1 presently stands rejected under 35 U.S.C. §102 as allegedly being anticipated by *Edanami* (U.S. Patent No. 6,297,846). Claim 1 reads as follows:

1. A system for automatically cropping graphical images, comprising:
 - memory for storing digital data that defines a graphical image captured by said system;
 - an object detector configured to perform a search of said digital data for an object of a particular type and to automatically identify, based on said search, a portion of said digital data that defines an image of an object of said particular type within said graphical image; and
 - an image cropper configured to automatically perform a cropping operation on said graphical image based on a position of said object image within said graphical image, said image cropper configured to determine said

position of said object image within said graphical image based on said portion automatically identified by said object detector, ***wherein said cropping operation performed on said graphical image is not based on any other graphical image captured by said system.*** (Emphasis added).

Applicant respectfully asserts that *Edanami* fails to disclose at least the features of claim 1 highlighted above. Therefore, *Edanami* is inadequate to reject claim 1 under 35 U.S.C. §102.

In this regard, *Edanami* discloses a “first embodiment” and a “second embodiment” of a display control system for videoconference terminals. In the “first embodiment,” a picture captured by a videoconference camera is clipped based on a detection of a participant in the videoconference in order to automatically control zooming. See column 3, line 65, through column 4, line 50. More specifically, an image clipping means 3 determines a “magnitude of the participant’s on-screen motion” and controls zooming based on this magnitude. See column 4, lines 30-42. Notably, it appears that multiple frames would be analyzed to determine the “magnitude of the participant’s on-screen motion.” Thus, the clipping performed by the clipping means 3 appears to be based on ***multiple*** graphical images. Accordingly, it does not appear that the “first embodiment” of the *Edanami* system has an “image cropper configured to automatically perform a clipping operation on (a) graphical image... wherein said cropping operation performed on said graphical image is not based on any other graphical image captured by said system,” as recited by claim 1.

A “second embodiment” of the *Edanami* system is shown by Figures 8-19. See column 12, lines 12-13. It is alleged in the Office Action that the “second embodiment” discloses a cropping operation. However, the “second embodiment” includes an “interframe difference calculation circuit 54” that calculates the “average difference value tinter over the entire frame image” based on the differences between “the present and previous frames.” See column 12, lines 33-42. Thus, it appears that the alleged cropping operation of the “second embodiment” is

based on *multiple* graphical images. Accordingly, it does not appear that the “second embodiment” of the *Edanami* system has an “image cropper configured to automatically perform a clipping operation on (a) graphical image... wherein said cropping operation performed on said graphical image is not based on any other graphical image captured by said system,” as recited by claim 1.

For at least the foregoing reasons, Applicant asserts that none of the embodiments disclosed by *Edanami* show at least the features of claim 1 highlighted above. Thus, the rejection of claim 1 under 35 U.S.C. §102 is improper and should be withdrawn.

Claims 2-4, 6-8, and 23-25

Claims 2-4, 6-8, and 23 presently stand rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Further, claims 24 and 25 presently stand rejected under 35 U.S.C. §103 as allegedly being unpatentable over *Edanami* in view of *Riley* (U.S. Patent No. 6,009,197). Applicant submits that the pending dependent claims 2-4, 6-8, and 23-25 contain all features of their respective independent claim 1. Since claim 1 should be allowed, as argued hereinabove, pending dependent claims 2-4, 6-8, and 23-25 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Claim 5

Claim 5 presently stands rejected under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Claim 5 reads as follows:

5. A system for automatically cropping graphical images, comprising:
memory for storing digital data that defines a graphical image;
an object detector configured to analyze said digital data and to automatically identify a graphical object within said graphical image; and
an image cropper configured to automatically identify, based on a position of said graphical object within said graphical image, said graphical object as an object to be removed from said graphical image and to automatically crop said digital data based on said determination such that said graphical object is removed from said graphical image. (Emphasis added).

Applicant respectfully asserts that *Edanami* fails to disclose at least the features of claim 5 highlighted above. Therefore, *Edanami* is inadequate to reject claim 5 under 35 U.S.C. §102.

In this regard, *Edanami* appears to disclose a system that removes participants in a videoconference from a graphical image. See Figures 19(A)-19(E). However, there is nothing in *Edanami* to indicate that the system “automatically identifies” a participant as an “object to be removed” based on a position of the participant within the graphical image. Thus, Applicant asserts that *Edanami* fails to disclose at least “an image cropper configured to ***automatically identify, based on a position of said graphical object within said graphical image, said graphical object as an object to be removed from said graphical image*** and to automatically crop said digital data based on said determination such that said graphical object is removed from said graphical image,” as recited by claim 5. (Emphasis added).

For at least the foregoing reasons, Applicant submits that *Edanami* fails to disclose each feature of amended claim 5. Accordingly, the 35 U.S.C. §102 rejection of claim 5 is improper and should be withdrawn.

Claim 9

Claim 9 presently stands rejected under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Claim 9 reads as follows:

9. A system for automatically cropping graphical images, comprising:
means for capturing graphical images;
memory for storing digital data that defines a graphical image captured by said capturing means;
means for performing a search of said digital data for an object of a particular type and for automatically identifying, based on said search, a portion of said digital data that defines an image of an object of said particular type within said graphical image; and
means for automatically cropping said graphical image by performing a cropping operation based on a position of said object image within said graphical image, said cropping means configured to determine said position of said object image within said graphical image based on said portion automatically identified by said identifying means, ***wherein said cropping operation is not based on any other graphical image captured by said capturing means.*** (Emphasis added).

For at least the reasons set forth above in the arguments for allowance of claim 1, Applicant submits that *Edanami* fails to disclose at least the features of claim 9 highlighted hereinabove. Thus, the 35 U.S.C. §102 rejection of claim 9 should be withdrawn.

Claims 10-15

Claims 10-12 and 15 apparently stand rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. In addition, claim 13 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Edanami* in view of *Riley*, and claim 14 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Edanami* in view of *Parulski* (U.S. Patent No. 6,650,366). Applicant submits that the pending dependent claims 10-15 contain all features of their respective independent claim 9. Since claim 9 should be allowed, as argued hereinabove,

pending dependent claims 10-15 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Furthermore, Applicant observes that paragraphs 5-7 of the Office Action appear to indicate that claims 10-12 are rejected, as described above. If this is indeed the case, Applicant respectfully requests that paragraph 3 of the Office Action be updated accordingly.

Claim 16

Claim 16 presently stands rejected under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Claim 16 reads as follows:

16. A method for automatically cropping graphical images, comprising the steps of:
capturing a graphical image;
storing digital data that defines a said graphical image;
automatically searching said digital data for an object of a particular type;
identifying, based on said searching step, a portion of said digital data that defines an image of an object of said particular type;
determining, based on said identified portion, a position of said object image within said graphical image; and
automatically cropping said graphical image based on said position of said object image, ***wherein said cropping step is not based on any captured image other than said graphical image.*** (Emphasis added).

For at least the reasons set forth above in the arguments for allowance of claim 1, Applicant submits that *Edanami* fails to disclose at least the features of claim 16 highlighted hereinabove. Thus, the 35 U.S.C. §102 rejection of claim 16 should be withdrawn.

Claims 17-22 and 27-29

Claims 17-19 and 28 apparently stand rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Further, claim 20 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Edanami* in view of

Riley, and claim 21 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Edanami*. In addition, claims 22, 27, and 29 presently stand rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Edanami* in view of *Parulski*. Applicant submits that the pending dependent claims 17-22 and 27-29 contain all features of their respective independent claim 16. Since claim 16 should be allowed, as argued hereinabove, pending dependent claims 17-22 and 27-29 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Furthermore, Applicant observes that paragraphs 5-7 of the Office Action appear to indicate that claims 17-19 are rejected, as described above. If this is indeed the case, Applicant respectfully requests that paragraph 3 of the Office Action be updated accordingly.

Claim 22 also stands rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. In this regard, it is asserted in paragraph 23 of the Office Action that “per claim 22, *Edanami* discloses wherein the step of automatically cropping further comprises the step of moving the face closer to a center of the picture.” However, claim 22 recites no such features, and the Office Action fails to establish that *Edanami* discloses all of the features actually recited by claim 22. Accordingly, the 35 U.S.C. §102 rejection of claim 22 is improper and should be withdrawn, notwithstanding the allowability of claim 16.

Claims 26 and 46

Claim 26 presently stands rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Further, claim 46 has been newly added via the amendments set forth herein. Applicant submits that the pending dependent claims 26 and 46 contain all features of their respective independent claim 5. Since claim 5 should be allowed, as argued

hereinabove, pending dependent claims 26 and 46 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Claim 30

Claim 30 presently stands rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Claim 30 presently reads as follows:

30. A system for automatically cropping graphical images, comprising:
an image capturing device configured to capture graphical images;
memory for storing digital data that defines a graphical image captured by said image capturing device;
an object detector configured to make a determination as to whether a portion of said digital data defines a facial image; and
an image cropper configured to automatically perform a cropping operation on said graphical image based on said determination, ***wherein said cropping operation is not based on any image captured by said image capturing device other than said graphical image.*** (Emphasis added).

For at least the reasons set forth hereinabove in the arguments for allowance of claim 1, Applicant submits that *Edanami* fails to disclose at least the features of claim 30 highlighted hereinabove. Thus, the rejection of claim 30 is improper and should be withdrawn.

Claims 31 and 32

Claim 31 presently stands rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Further, claim 32 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Edanami* in view of *Parulski*. Applicant submits that the pending dependent claims 31 and 32 contain all features of their respective independent claim 30. Since claim 30 should be allowed, as argued hereinabove, pending dependent claims 31 and 32 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Claim 33

Claim 33 presently stands rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Claim 33 presently reads as follows:

33. A method for automatically cropping graphical images, comprising the steps of:
storing digital data that defines a graphical image;
detecting a plurality of faces within said graphical image;
automatically identifying at least one of said faces as an object of interest based on a position of said at least one facial image; and
automatically cropping said graphical image based on said selecting step such that said at least one face is substantially centered within said graphical image. (Emphasis added).

Applicant respectfully asserts that *Edanami* fails to disclose at least the features of claim 33 highlighted above. Therefore, *Edanami* is inadequate to reject claim 33 under 35 U.S.C. §102.

In this regard, *Edanami* appears to disclose a system that removes participants in a videoconference from a graphical image. See Figures 19(A)-19(E). However, when the graphical image contains a group of objects, there is nothing in *Edanami* to indicate that the system “automatically identifies” a participant as an “object of interest” to be individually displayed based on a position of the participant. Thus, Applicant asserts that *Edanami* fails to disclose at least “automatically identifying at least one of said faces as an object of interest based on a position of said at least one facial image” and “automatically cropping said graphical image based on said selecting step such that said at least one face is substantially centered within said graphical image,” as recited by claim 33.

For at least the foregoing reasons, Applicant submits that *Edanami* fails to disclose each feature of amended claim 33. Accordingly, the 35 U.S.C. §102 rejection of claim 33 is improper and should be withdrawn.

Claims 34, 35, and 55

Claim 34 presently stands rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Further, claim 35 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Edanami* in view of *Parulski*. In addition, claim 55 has been newly added via the amendments set forth herein. Applicant submits that the pending dependent claims 34, 35, and 55 contain all features of their respective independent claim 33. Since claim 33 should be allowed, as argued hereinabove, pending dependent claims 34, 35, and 55 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Claim 36

Claim 36 presently stands rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Claim 36 presently reads as follows:

36. A method for cropping a graphical image, comprising the steps of:
detecting a plurality of faces in the graphical image;
automatically cropping the graphical image; and
***determining if one of the faces is close to a center of the graphical
image prior to said cropping step,
wherein said cropping step is based on said determining step.***
(Emphasis added).

Applicant respectfully asserts that *Edanami* fails to disclose at least the features of claim 36 highlighted above. Therefore, *Edanami* is inadequate to reject claim 36 under 35 U.S.C. §102.

In this regard, *Edanami* appears to describe a system that clips a graphical image containing a plurality of participants, as shown by Figure 19(B), such that the graphical image contains only a single participant, as shown by Figures 19(c)-19(E). Even though Figure 19(B) shows a participant close to the center of the graphical image, there is nothing in *Edanami* to indicate that the system actually makes a determination as to whether any of the participants is

close to a center of the graphical image shown by Figure 19(B). Accordingly, Applicant asserts that *Edanami* fails to disclose “determining if one of the faces is close to a center of the graphical image prior to said cropping step,” as recited by claim 36.

For at least the foregoing reasons, Applicant submits that *Edanami* fails to disclose each feature of amended claim 36. Accordingly, the 35 U.S.C. §102 rejection of claim 36 is improper and should be withdrawn.

Claims 37-40 and 45

Claims 37-40 and 45 presently stand rejected in the Office Action under 35 U.S.C. §102 as allegedly being anticipated by *Edanami*. Applicant submits that the pending dependent claims 37-40 and 45 contain all features of their respective independent claim 36. Since claim 36 should be allowed, as argued hereinabove, pending dependent claims 37-40 and 45 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Claim 47

Claim 47 has been newly added via the amendments set forth herein. Claim 47 presently reads as follows:

47. A system for automatically cropping graphical images, comprising:
memory for storing digital data that defines a graphical image;
an object detector configured to detect a plurality of objects of a particular type within said graphical image based on a position of said at least one object; and
an image cropper configured to automatically identify at least one of said detected objects as an object of interest based on a position of said at least one detected object within said graphical image and to crop said graphical image such that said at least one object is substantially centered within said graphical image.

Applicant submits that the cited art fails to disclose or teach each of the above features of claim 47. Accordingly, claim 47 is allowable.

Claims 48-50

Claims 48-50 have been newly added via the amendments set forth herein. Applicant submits that the pending dependent claims 48-50 contain all features of their respective independent claim 47. Since claim 47 should be allowed, as argued hereinabove, pending dependent claims 48-50 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Claim 51

Claim 51 has been newly added via the amendments set forth herein. Claim 51 presently reads as follows:

51. A method for automatically cropping graphical images, comprising:
detecting an object within said graphical image;
determining that said object is close to an edge of said graphical image;
and
automatically removing said object from said graphical image based on
said determining.

Applicant submits that the cited art fails to disclose or teach each of the above features of claim 51. Accordingly, claim 51 is allowable.

Claims 52 and 53

Claims 52 and 53 have been newly added via the amendments set forth herein. Applicant submits that the pending dependent claims 52 and 53 contain all features of their respective independent claim 51. Since claim 51 should be allowed, as argued hereinabove,

pending dependent claims 52 and 53 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Claim 54

Claim 54 has been newly added via the amendments set forth herein. Claim 51 presently reads as follows:

54. A method for cropping a graphical image, comprising:
detecting a face in a digital image of a picture; and
automatically cropping the digital image based on a position of the face
within the digital image,
wherein the automatically cropping further comprises moving the face
away from a center of the picture.

Applicant submits that claim 54 includes features similar to claim 44, which has been indicated as allowable by the outstanding Office Action. Applicant asserts that claim 54 is allowable for at least the reasons that claim 44 is allowable.

Allowable Subject Matter

Claim 44 has been indicated as allowable by the outstanding Office Action if this claim is rewritten to include the limitations of its base claim. Accordingly, pending claims 44 has been amended herein to include the features of its base claim, and Applicant respectfully requests that the objection to claim 44 be withdrawn.

CONCLUSION

Applicant respectfully requests that all outstanding objections and rejections be withdrawn and that this application and all presently pending claims be allowed to issue. If the Examiner has any questions or comments regarding Applicant's response, the Examiner is encouraged to telephone Applicant's undersigned counsel.

Respectfully submitted,

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